Hibbing Taconite Company

Managed by ArcelorMittal Hibbing Management LLC

January 22, 2020

Regional Administrator
Air and Radiation Division
C/O Kathleen D'Agostino
US EPA, Region 5 (A-18J)
77 West Jackson Boulevard
Chicago, IL 60604
dagostino.kathleen@epa.gov

Re: Hibbing Taconite Company's Quarter 4 2019

Excess Emissions & Monitoring Performance Report

Permit Number 13700061

To Whom it May Concern:

Hibbing Taconite Company (HTC) is subject to the 2016 Revision to 2013 Taconite Federal Implementation Plan Establishing BART for Taconite Plants (FIP) which requires the installation of Continuous Emission Monitors (CEMS) to monitor nitrogen oxides (NO_x) and sulfur dioxide (SO_2). This submittal satisfies the requirements of 40 CFR 52.1235(e)(7).

Per 40 CFR 52.1235(c)(4)(v), HTC is to provide a report of each performance evaluation and QA/QC check within 60 days of completion. The most recent performance evaluation results were submitted to the EPA on November 4th, 2019 from the CGAs performed during October 2019. A summary of the results are attached in Attachment A. During the reporting period, there were no out-of-control periods from the daily calibration drift assessments.

HTC does not have a limit in effect at this time associated with the NO_x CEMS, therefore the proposed NO_x limit listed in the FIP is not yet enforceable. The initial SO_2 limit came into effect during the 1^{st} Quarter 2017 reporting period and was revised on April 11, 2018 to 347.4 lbs SO_2 /hr. Attached is HTC's Quarterly Excess Emissions and Monitoring System Performance Report. Considering that HTC's NO_x limit is not yet enforceable, HTC's report will contain a zero (0) in the boxes related to excess emission events. Periods of downtime that occurred during this reporting quarter are listed by monitor in the attached report.

Please contact Julie Lucas at (218) 262-6856 or <u>julie.lucas@arcelormittal.com</u> if you have any questions regarding this report.

I certify, based on the information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Sincerely,

Edward LaTendresse

General Manager

Cc:

Julie Lucas, HTC

Edward & of and

Rich Zavoda, ArcelorMittal

Attachment A: Quality Control Reporting
Relative Accuracy Test Audit Results
Cylinder Gas Audit Results

					RATA	A's						
Emission Unit (EU)	Stack Vent (SV)	EU Description	Monitor	Pollutant	Audit Date	Results (%)	Next Test Due	Pass/Fail	Comments			
	021	Furnace Line One.	No MR	NO _x	7/17/2019	6.0	3rd Quarter, 2019	Pass	Results less than 20%			
	V	Stack 1		SO₂	7/17/2019	5.0	3rd Quarter, 2019	Pass	Results less than 20%			
9	022	Furnace	N - 140	NOx	7/18/2019	5.8	3rd Quarter, 2019	Pass	Results less than 20%			
020	022	Line One, Stack 2	No MR	SO₂	7/18/2019	9.5	3rd Quarter, 2019	Pass	Results less than 20%			
020	022	Furnace	No NAD	NOx	7/17/2019	2.0	3rd Quarter, 2019	Pass	Results less than 20%			
	023	Line One, Stack 3	No MR	SO₂	7/17/2019	14.7	3rd Quarter, 2019	Pass	Results less than 20%			
	024	Furnace	No AAD	NOx	7/18/2019	13.0	3rd Quarter, 2019	Pass	Results less than 20%			
	024	Line One, Stack 4	No MR	SO₂	7/18/2019	14.2	3rd Quarter, 2019	Pass	Results less than 20%			
	025	025	Furnace Line Two,			No MR	NO _x	7/16/2019	4.1	3rd Quarter, 2019	Pass	Results less than 20%
		Stack 4		SO₂	7/16/2019	3.8	3rd Quarter, 2019	Pass	Results less than 20%			
	026	Furnace	No MR	NOx	7/16/2019	5.0	3rd Quarter, 2019	Pass	Results less than 20%			
021	026	Line Two, Stack 3		SO₂	7/16/2019	5.1	3rd Quarter, 2019	Pass	Results less than 20%			
	027	Furnace Line Two, Stack 2	Two, No MR	NOx	7/16/2019	5.1	3rd Quarter, 2019	Pass	Results less than 20%			
	027			SO₂	7/16/2019	4.0	3rd Quarter, 2019	Pass	Results less than 20%			
	039	Furnace	No MR	NO _x	7/16/2019	9.1	3rd Quarter, 2019	Pass	Results less than 20%			
	028	Line Two, Stack 1		SO₂	7/16/2019	8.5	3rd Quarter, 2019	Pass	Results less than 20%			
	029	Furnace Line One, Stack 1			No MR	NO _x	7/15/2019	6.2	3rd Quarter, 2019	Pass	Results less than 20%	
				SO₂	7/15/2019	6.0	3rd Quarter, 2019	Pass	Results less than 20%			
	020	Furnace	No MAD	NOx	7/15/2019	5.6	3rd Quarter, 2019	Pass	Results less than 20%			
022	030	Line One, Stack 2	No MR	SO₂	7/15/2019	11.2	3rd Quarter, 2019	Pass	Results less than 20%			
	034	Furnace	No AAD	NOx	7/15/2019	3.8	3rd Quarter, 2019	Pass	Results less than 20%			
П	031	Line One, Stack 3	No MR	SO₂	7/15/2019	9.5	3rd Quarter, 2019	Pass	Results less than 20%			
	022	Furnace	No MP	NO _x	7/15/2019	6.5	3rd Quarter, 2019	Pass	Results less than 20%			
	032	Line One, Stack 4	No MR	SO₂	7/15/2019	10.8	3rd Quarter, 2019	Pass	Results less than 20%			

^{*}The full RATA report has previously been submitted to the EPA. Refer to the referenced report for more information.

					CGA's				
Emission Unit (EU)	Stack Vent (SV)	EU Description	Monitor	Pollutant	Audit Date	Results (L/M%)	Next Test Due	Pass/Fail	Comments
	021	021	No MR	NO _x	10/30/2019	0.8/1.3	Pass	1st Quarter, 2020	
	022			SO₂	10/29/2019	3.9/2.9	Pass	1st Quarter, 2020	
	022	022	No MR	NOx	10/30/2019	2.5/3.0	Pass	1st Quarter, 2020	
020		022	INO IVIK	SO₂	10/29/2019	2.6/1.2	Pass	1st Quarter, 2020	None
020	023	023	No MR	NOx	10/30/2019	3.1/3.7	Pass	1st Quarter, 2020	None
		023	INO IVIK	SO₂	10/30/2019	3.6/0.4	Pass	1st Quarter, 2020	
	024	024	No MP	NOx	10/30/2019	1.0/1.2	Pass	1st Quarter, 2020	
	,	024	No MR	SO₂	10/30/2019	3.0/0.3	Pass	1st Quarter, 2020	
021	025	025	No MR	NOx	10/29/2019	2.0/2.2	Pass	1st Quarter, 2020	
				SO₂	10/30/2019	2.6/0.3	Pass	1st Quarter, 2020	None
	026	026	No MR	NOx	10/29/2019	1.2/1.7	Pass	1st Quarter, 2020	
				SO₂	10/30/2019	5.9/2.6	Pass	1st Quarter, 2020	
	027	027	No MR	NOx	10/29/2019	2.1/2.3	Pass	1st Quarter, 2020	
				SO₂	10/30/2019	6.4/3.1	Pass	1st Quarter, 2020	
	028	028 028	No MR	NO _x	10/29/2019	0.7/1.3	Pass	1st Quarter, 2020	
				SO₂	10/30/2019	6.0/2.7	Pass	1st Quarter, 2020	
	029	029	No MR	NOx	10/29/2019	2.1/1.8	Pass	1st Quarter, 2020	
				SO₂	10/30/2019	3.8/2.8	Pass	1st Quarter, 2020	
	030	030	No MR	NOx	10/29/2019	2.1/2.1	Pass	1st Quarter, 2020	
022		030	140 IVIK	SO₂	10/30/2019	3.3/2.6	Pass	1st Quarter, 2020	None
	031	031	No MR	NO _x	10/29/2019	0.4/0.2	Pass	1st Quarter, 2020	
		031	NO WIN	SO₂	10/30/2019	2.9/1.2	Pass	1st Quarter, 2020	
	032	032	No MR	NO _x	10/29/2019	0.5/0.1	Pass	1st Quarter, 2020	
		032	NO WIK	SO₂	10/30/2019	2.1/3.3	Pass	1st Quarter, 2020	

	CYLINDER GAS AUDIT INFORMATION									
Gas	Test Level	Analyzers	Cylinder ID Number	Date of Certification	Type of Certification	Certified Audit Value				
NOX	Low	SV021-SV032	CC214314	6/10/2019	EPA Protocol	49.53				
NOX	Mid	SV021-SV032	ХС035989В	8/9/2019	EPA Protocol	99.64				
SO2	Low	SV021-SV024	CC416844	8/13/2018	EPA Protocol	12.69				
SO2	Low	SV023-SV032	EB0011292	7/17/2019	EPA Protocol	12.47				
SO2	Mid	SV021-SV024	CC414268	11/7/2017	EPA Protocol	24.93				
SO2	Mid	SV023-SV032	CC414441	8/9/2018	EPA Protocol	24.3				

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Attachment B: Excess Emissions Report

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North

Company Address: Hibbing MN

Process Unit Identification: EU020, EU021, EU022

Process Unit Description: Pellet Indurating Furnace Line No. 1, 2 & 3; straight grate indurating furnaces.

Total Source Operating Time in Reporting Period: See Individual Stacks
Total Source Operating Days in Reporting Period: See Individual Stacks

Emission Limitation: 347.4 lbs SO2/hr (30 day rolling average)

Analyzer Analyte: SO

Analyzer Manufacturer:

Analyzer Manufacturer Model No.:

Analyzer Serial Number:

Date of Latest CMS Certification or Audit:

See Individual Stacks

See Individual Stacks

See Individual Stacks

Description of changes in CEMS, processes, or

controls since last reporting period:

See Individual Stacks

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

Excess Emissions Details							
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details									
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action						
			See Indiv	idual Stacks						
l										

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: **EU020**

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,962 hours
Total Source Operating Days in Reporting Period: 83 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer:

Analyzer Manufacturer Model No.:

Analyzer Serial Number:

Date of Latest CMS Certification or Audit:

See Individual Stacks
See Individual Stacks
See Individual Stacks

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

See Individual Stacks

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	4.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	4.0
3. Total CMS Downtime (%)	0.20%

					Excess Emissions Details		
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details									
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action						
11/05/2019 07:00	11/05/2019 10:59	4.0	Monitor equipment malfunctions	North gas flow meter malfunction repaired. Returned to operation. Followed SSM plan.						
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Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU020 SV021

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,962 hours
Total Source Operating Days in Reporting Period: 83 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer: Teledyne Monitor Labs

 Analyzer Manufacturer Model No.:
 T200M

 Analyzer Serial Number:
 225

 Date of Latest CMS Certification or Audit:
 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
There were no periods of downtime during this reporting po		time during this reporting period.							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU020 SV021

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,962 hours
Total Source Operating Days in Reporting Period: 83 days
Emission Limitation: N/A
Analyzer Analyte: SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 137
Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary	
1. Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%
	Duration of excess emissions in reporting period due to: a. Startup/Shutdown b. Control equipment problems c. Process problems d. Other known causes e. Unknown causes 2. Total duration of excess emissions (days)

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
There were no periods of downtime during this re		There were no periods of down	time during this reporting period.						
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU020 SV021

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

Analyzer Manufacturer:

1,962 hours

83 days

N/A

Stack Flow

Stack Flow

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 8398564/18118323

Date of Latest CMS Certification or Audit: 7/17/2019

Description of changes in CEMS, processes, or

CMS Performance Summary						
CMS Downtime in reporting period due to:						
a. Monitor equipment malfunctions	7.0					
b. Non-Monitor equipment malfunctions	0.0					
c. Quality assurance calibration	0.0					
d. Other known causes	0.0					
e. Unknown causes	0.0					
2. Total CMS Downtime (hours)	7.0					
3. Total CMS Downtime (%)	0.35%					

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
 b. Control equipment problems 	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

	Excess Emissions Details						
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
10/13/2019 13:00	10/13/2019 16:59	4.0	Monitor equipment malfunctions	Flow meter cleaned. Returned to operation. Followed SSM plan.				
12/11/2019 02:00	12/11/2019 03:59	2.0	Monitor equipment malfunctions	Thawed frozen flow meter. Returned to operation. Follwed SSM plan.				
12/11/2019 06:00	12/11/2019 06:59	1.0	Monitor equipment malfunctions	Thawed frozen flow meter. Returned to operation. Follwed SSM plan.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU020 SV022

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,962 hours
Total Source Operating Days in Reporting Period: 83 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T200M
Analyzer Serial Number: 226
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary						
Duration of excess emissions in reporting period due to:						
a. Startup/Shutdown	0.0					
b. Control equipment problems	0.0					
c. Process problems	0.0					
d. Other known causes	0.0					
e. Unknown causes	0.0					
2. Total duration of excess emissions (days)	0.0					
3. Total duration of excess emissions (%)	0.00%					

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

Excess Emissions Details								
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action		
There were no periods of excess emissions during this reporting period								

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			There were no periods of down	time during this reporting period.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU020 SV022

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,962 hours
Total Source Operating Days in Reporting Period: 83 days
Emission Limitation: N/A
Analyzer Analyte: SO2

Analyzer Manufacturer: Teledyne Monitor Labs

 Analyzer Manufacturer Model No.:
 T100H

 Analyzer Serial Number:
 136

 Date of Latest CMS Certification or Audit:
 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%
	1. Duration of excess emissions in reporting period due to: a. Startup/Shutdown b. Control equipment problems c. Process problems d. Other known causes e. Unknown causes 2. Total duration of excess emissions (days)

CMS Performance Summary					
CMS Downtime in reporting period due to:					
a. Monitor equipment malfunctions	0.0				
 b. Non-Monitor equipment malfunctions 	0.0				
c. Quality assurance calibration	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total CMS Downtime (hours)	0.0				
3. Total CMS Downtime (%)	0.00%				

Excess Emissions Details								
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action		
There were no periods of excess emissions during this reporting period								

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			There were no periods of down	time during this reporting period.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU020 SV022

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

83 days

M/A

Stack Flow

Analyzer Analyte:

Analyzer Manufacturer:

Sick Maihak

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318687/ 11318690

Date of Latest CMS Certification or Audit: 7/18/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary					
0.0					
0.0					
0.0					
0.0					
0.0					
0.0					
0.00%					

Excess Emissions Details							
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
There were no periods of downtime during this reporting period.				me during this reporting period.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU020 SV023

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,962 hours
Total Source Operating Days in Reporting Period: 83 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer: Teledyne Moniror Labs

 Analyzer Manufacturer Model No.:
 T200M

 Analyzer Serial Number:
 224

 Date of Latest CMS Certification or Audit:
 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	3.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	3.0
3. Total CMS Downtime (%)	0.15%

					Excess Emissions Details		
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
12/22/19 11:00	12/22/2019 13:59	3.0	Monitor equipment malfunctions	Repaired NOX analyzer malfunction. Returned to operation, Followed SSM plan.					
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU020 SV023

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

1,962 hours

83 days

N/A

SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 134
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
			There were no periods of down	ntime during this reporting period.					
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: **Hibbing Taconite Company**

4950 Hwy 5 North Company Address: Hibbing MN Process Unit Identification: EU020 SV023

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period: 1,962 hours Total Source Operating Days in Reporting Period: 83 days Emission Limitation: Analyzer Analyte: Stack Flow Analyzer Manufacturer: Sick Maihak

FLSE 100-H K178 35HSHS Analyzer Manufacturer Model No.: Analyzer Serial Number: 11318686/ 11318679

Date of Latest CMS Certification or Audit: 7/17/2019

Description of changes in CEMS, processes, or controls since last reporting period:

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

Excess Emissions Details						
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			There were no periods of downt	me during this reporting period.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU020 SV024

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,962 hours
Total Source Operating Days in Reporting Period: 83 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer: Teledyne Moniror Labs

 Analyzer Manufacturer Model No.:
 T200M

 Analyzer Serial Number:
 215

 Date of Latest CMS Certification or Audit:
 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details		
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
	There were no periods of downtime during this reporting period.							
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: **Hibbing Taconite Company**

4950 Hwy 5 North Hibbing MN Process Unit Identification: EU020 SV024

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,962 hours Total Source Operating Days in Reporting Period: 83 days Emission Limitation: N/A Analyzer Analyte: SO2

Analyzer Manufacturer: **Teledyne Monitor Labs**

Analyzer Manufacturer Model No.: T100H Analyzer Serial Number: 135 Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary	
1. Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%
	Duration of excess emissions in reporting period due to: a. Startup/Shutdown b. Control equipment problems c. Process problems d. Other known causes e. Unknown causes 2. Total duration of excess emissions (days)

CMS Performance Summary						
CMS Downtime in reporting period due to:						
a. Monitor equipment malfunctions	0.0					
b. Non-Monitor equipment malfunctions	0.0					
c. Quality assurance calibration	0.0					
d. Other known causes	0.0					
e. Unknown causes	0.0					
2. Total CMS Downtime (hours)	0.0					
3. Total CMS Downtime (%)	0.00%					

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
	There were no periods of downtime during this reporting period.							
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU020 SV024

Process Unit Description: Pellet Indurating Furnace Line No. 1; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period:
Total Source Operating Days in Reporting Period:
Emission Limitation:
Analyzer Analyte:
Stack Flow
Analyzer Manufacturer:
Sick Maihak

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 13438339/11168507

Date of Latest CMS Certification or Audit: 7/18/2019

Description of changes in CEMS, processes, or

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
Total duration of excess emissions (days)	0.0
Total duration of excess emissions (%)	0.00%
	a. Startup/Shutdown b. Control equipment problems c. Process problems d. Other known causes e. Unknown causes Total duration of excess emissions (days)

					Excess Emissions Details		
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
	There were no periods of downtime during this reporting period.								
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU021

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 2,039 hours
Total Source Operating Days in Reporting Period: 87 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer:

Analyzer Manufacturer Model No.:

Analyzer Serial Number:

Date of Latest CMS Certification or Audit:

See Individual Stacks
See Individual Stacks
See Individual Stacks

Description of changes in CEMS, processes, or

controls since last reporting period:

See Individual Stacks

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			See Indiv	idual Stacks				
		0.0						
		0.00						
		0.00						
		0.00						
		0.00						
		0.00						
		0.00						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU021 SV025

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 2,039 hours
Total Source Operating Days in Reporting Period: 87 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T200M
Analyzer Serial Number: 199
Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			There were no periods of down	ntime during this reporting period.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU021 SV025

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

2,039 hours

87 days

N/A

SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 119
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			There were no periods of down	ntime during this reporting period.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU021 SV025

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

Analyzer Manufacturer:

Sick Maihak

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318688/ 11318689

Date of Latest CMS Certification or Audit: 7/16/2019

Description of changes in CEMS, processes, or

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details						
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action			
			There were no periods of downti	me during this reporting period.			
		0.0					
		0.0					
		0.0					
		0.0					
		0.0					
		0.0					
		0.0					

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU021 SV026

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

2,039 hours

87 days

N/A

NOX

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T200M
Analyzer Serial Number: 197
Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			There were no periods of down	ntime during this reporting period.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU021 SV026

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 2,039 hours

Total Source Operating Days in Reporting Period: 87 days

Emission Limitation: N/A

Analyzer Analyte: SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 116
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
There were no periods of downtime during				ntime during this reporting period.				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: **Hibbing Taconite Company**

4950 Hwy 5 North

N/A

Company Address: Hibbing MN Process Unit Identification: EU021 SV026

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 2,039 hours Total Source Operating Days in Reporting Period: 87 days Emission Limitation: N/A Analyzer Analyte: Stack Flow Analyzer Manufacturer: Sick Maihak

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318672/8398565

Date of Latest CMS Certification or Audit: 7/16/2019

Description of changes in CEMS, processes, or

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3 Total CMS Downtime (%)	0.00%

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

	Excess Emissions Details									
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action				
	There were no periods of excess emissions during this reporting period									

	CMS Downtime Details											
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action								
	There were no periods of downtime during this reporting period.											
		0.0										
		0.0										
		0.0										
		0.0										
		0.0										
		0.0										
		0.0										

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU021 SV027

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

2,039 hours

87 days

N/A

N/A

NOX

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T200M
Analyzer Serial Number: 179
Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary						
Duration of excess emissions in reporting period due to:						
a. Startup/Shutdown	0.0					
b. Control equipment problems	0.0					
c. Process problems	0.0					
d. Other known causes	0.0					
e. Unknown causes	0.0					
Total duration of excess emissions (days)	0.0					
3. Total duration of excess emissions (%)	0.00%					

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

Excess Emissions Details								
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action		
	There were no periods of excess emissions during this reporting period							

	CMS Downtime Details											
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action								
		ntime during this reporting period.										
		0.0										
		0.0										
		0.0										
		0.0										
		0.0										
		0.0										
•		0.0										

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

N/A

Process Unit Identification: EU021 SV027

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

2,039 hours

87 days

N/A

SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 115
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

Company Address:

CMS Performance Summary	
CMS Downtime in reporting period due to:	
 a. Monitor equipment malfunctions 	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

0.0
0.0
0.0
0.0
0.0
0.0
0.00%

	Excess Emissions Details									
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action				
	There were no periods of excess emissions during this reporting period									

	CMS Downtime Details											
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action								
	There were no periods of downtime during this reporting period.											
		0.0										
		0.0										
		0.0										
		0.0										
		0.0										
		0.0										
		0.0										

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU021 SV027

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

Analyzer Manufacturer:

Sick Maihak

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318684/ 11318691

Date of Latest CMS Certification or Audit: 7/16/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

CMS Performance Summary
CMS Downtime in reporting period due to:
a. Monitor equipment malfunctions
 b. Non-Monitor equipment malfunctions
c. Quality assurance calibration
d. Other known causes
e. Unknown causes

0.0

0.0

0.0

0.0

0.0

0.0

0.00%

Excess Emissions Summary 1. Duration of excess emissions in reporting period due to: a. Startup/Shutdown 0.0 b. Control equipment problems 0.0 c. Process problems 0.0 d. Other known causes 0.0 e. Unknown causes 0.0 2. Total duration of excess emissions (days) 0.0 3. Total duration of excess emissions (%) 0.00%

Excess Emissions Details									
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action			
	There were no periods of excess emissions during this reporting period								

2. Total CMS Downtime (hours)

3. Total CMS Downtime (%)

	CMS Downtime Details									
Start Date & Time	End Date & Time	& Time Duration of Monitor Cause of Monitor Downtime		Corrective Action						
	There were no periods of downtime during this reporting period.									
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0	_							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North

N/A

Company Address:

Hibbing MN

Process Unit Identification:

EU021 SV028

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

2,039 hours

87 days

N/A

NOX

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T200M
Analyzer Serial Number: 198
Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

CMS Performance Summary							
CMS Downtime in reporting period due to:							
a. Monitor equipment malfunctions	0.0						
b. Non-Monitor equipment malfunctions	0.0						
c. Quality assurance calibration	0.0						
d. Other known causes	0.0						
e. Unknown causes	0.0						
2. Total CMS Downtime (hours)	0.0						
3. Total CMS Downtime (%)	0.00%						

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

Excess Emissions Details							
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
	There were no periods of downtime during this reporting period.								
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0	_						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

N/A

Process Unit Identification: EU021 SV028

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:

Total Source Operating Days in Reporting Period:

Emission Limitation:

Analyzer Analyte:

2,039 hours

87 days

N/A

SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 117
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

CMS Performance Summary							
CMS Downtime in reporting period due to:							
 a. Monitor equipment malfunctions 	0.0						
b. Non-Monitor equipment malfunctions	0.0						
c. Quality assurance calibration	0.0						
d. Other known causes	0.0						
e. Unknown causes	0.0						
2. Total CMS Downtime (hours)	0.0						
3 Total CMS Downtime (%)	0.00%						

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

	Excess Emissions Details							
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action		
There were no periods of excess emissions during this reporting period								

	CMS Downtime Details								
Start Date & Time	tart Date & Time		Cause of Monitor Downtime	Corrective Action					
	There were no periods of downtime during this reporting period.								
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0	_						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU021 SV028

Process Unit Description: Pellet Indurating Furnace Line No. 2; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period:

7 Total Source Operating Days in Reporting Period:

87 days

87 days

87 days

88 Analyzer Analyte:

89 Stack Flow

80 Analyzer Manufacturer:

80 Sick Maihak

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318678/ 11318673

Date of Latest CMS Certification or Audit: 7/16/2019

Description of changes in CEMS, processes, or

OMO D(
CMS Performance Summary						
CMS Downtime in reporting period due to:						
 a. Monitor equipment malfunctions 	0.0					
 b. Non-Monitor equipment malfunctions 	0.0					
c. Quality assurance calibration	0.0					
d. Other known causes	0.0					
e. Unknown causes	0.0					
2. Total CMS Downtime (hours)	0.0					
3. Total CMS Downtime (%)	0.00%					

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

Excess Emissions Details							
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details									
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action						
	There were no periods of downtime during this reporting period.									
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU022

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,854 hours
Total Source Operating Days in Reporting Period: 79 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer:

Analyzer Manufacturer Model No.:

Analyzer Serial Number:

Date of Latest CMS Certification or Audit:

See Individual Stacks

See Individual Stacks

See Individual Stacks

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

See Individual Stacks

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details									
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action						
	See Individual Stacks									
		0.00								
		0.00								
		0.00								
		0.00								
		0.00								
		0.00								
		0.00								

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU022 SV029

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,854 hours
Total Source Operating Days in Reporting Period: 79 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T200M
Analyzer Serial Number: 213
Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary							
Duration of excess emissions in reporting period due to:							
a. Startup/Shutdown	0.0						
b. Control equipment problems	0.0						
c. Process problems	0.0						
d. Other known causes	0.0						
e. Unknown causes	0.0						
2. Total duration of excess emissions (days)	0.0						
3. Total duration of excess emissions (%)	0.00%						

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	5.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	5.0
3. Total CMS Downtime (%)	0.27%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
11/16/2019 12:00	11/16/2019 12:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.					
11/16/2019 16:00	11/16/2019 16:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.					
11/16/2019 20:00	11/16/2019 20:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.					
11/17/2019 11:00	11/17/2019 11:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.					
11/17/2019 15:00	11/17/2019 15:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.					
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU022 SV029

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,854 hours
Total Source Operating Days in Reporting Period: 79 days
Emission Limitation: N/A
Analyzer Analyte: SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 129
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary						
Duration of excess emissions in reporting period due to:						
a. Startup/Shutdown	0.0					
b. Control equipment problems	0.0					
c. Process problems	0.0					
d. Other known causes	0.0					
e. Unknown causes	0.0					
Total duration of excess emissions (days)	0.0					
3. Total duration of excess emissions (%)	0.00%					

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	5.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	5.0
3. Total CMS Downtime (%)	0.27%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details									
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action						
11/16/2019 12:00	11/16/2019 12:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.						
11/16/2019 16:00	11/16/2019 16:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.						
11/16/2019 20:00	11/16/2019 20:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.						
11/17/2019 11:00	11/17/2019 11:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.						
11/17/2019 15:00	11/17/2019 15:59	1.0	Monitor equipment malfunctions	Unknown sporadic instrument issue. Returned to operation. Followed SSM plan.						
		0.0								
		0.0								
		0.0								

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU022 SV029

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period:
Total Source Operating Days in Reporting Period:
Emission Limitation:
Analyzer Analyte:
Analyzer Manufacturer:

1,854 hours
79 days
N/A
Stack Flow
Stack Flow

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318676/ 11318683

Date of Latest CMS Certification or Audit: 7/15/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

CMS Performance Summary							
CMS Downtime in reporting period due to:							
a. Monitor equipment malfunctions	0.0						
b. Non-Monitor equipment malfunctions	0.0						
c. Quality assurance calibration	0.0						
d. Other known causes	0.0						
e. Unknown causes	0.0						
2. Total CMS Downtime (hours)	0.0						

0.00%

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

Excess Emissions Details						
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

3. Total CMS Downtime (%)

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
			There were no periods of monitor do	wntime during this reporting period					
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU022 SV030

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,854 hours
Total Source Operating Days in Reporting Period: 79 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T200M
Analyzer Serial Number: 212
Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary							
Duration of excess emissions in reporting period due to:							
a. Startup/Shutdown	0.0						
b. Control equipment problems	0.0						
c. Process problems	0.0						
d. Other known causes	0.0						
e. Unknown causes	0.0						
2. Total duration of excess emissions (days)	0.0						
3. Total duration of excess emissions (%)	0.00%						

CMC Desfermence Communication	
CMS Performance Summary	
CMS Downtime in reporting period due to:	
 a. Monitor equipment malfunctions 	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details									
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action						
	There were no periods of monitor downtime during this reporting period									
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU022 SV030

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,854 hours
Total Source Operating Days in Reporting Period: 79 days
Emission Limitation: N/A
Analyzer Analyte: SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 130
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

0.0
0.0
0.0
0.0
0.0
0.0
0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details									
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action						
	There were no periods of monitor downtime during this reporting period									
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU022 SV030

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:
Total Source Operating Days in Reporting Period:
Total Source Operating Days in Reporting Period:
Total Source Operating Days in Reporting Period:
N/A

Analyzer Analyte:
Analyzer Analyte:
Stock Flow
Sick Maihak

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318682/ 11318681

Date of Latest CMS Certification or Audit: 7/15/2019

Description of changes in CEMS, processes, or

	Excess Emissions Summary	
Г	Duration of excess emissions in reporting period due to:	
	a. Startup/Shutdown	0.0
	b. Control equipment problems	0.0
	c. Process problems	0.0
	d. Other known causes	0.0
	e. Unknown causes	0.0
1	Total duration of excess emissions (days)	0.0
Ŀ	3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

				Excess Emissions Details			
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant Magnitude Emission	Cause of Excess Emissions	Corrective Action		
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details									
Start Date & Time	End Date & Time	End Date & Time Duration of Monitor Downtime (hours) Cause of Monitor Downtime		Corrective Action						
			There were no periods of monitor do	wntime during this reporting period						
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								
		0.0								

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU022 SV031

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,854 hours
Total Source Operating Days in Reporting Period: 79 days
Emission Limitation: N/A
Analyzer Analyte: NOX

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T200M
Analyzer Serial Number: 214
Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
b. Non-Monitor equipment malfunctions	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details				
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action			
	There were no periods of excess emissions during this reporting period								

	CMS Downtime Details								
Start Date & Time	Start Date & Time End Date & Time Duration of Monitor Downtime (hours) Cause of Monitor Downtime		Cause of Monitor Downtime	Corrective Action					
			There were no periods of monitor of	downtime during this reporting period					
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU022 SV031

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,854 hours
Total Source Operating Days in Reporting Period: 79 days
Emission Limitation: N/A
Analyzer Analyte: SO2

Analyzer Manufacturer: Teledyne Monitor Labs

 Analyzer Manufacturer Model No.:
 T100H

 Analyzer Serial Number:
 132

 Date of Latest CMS Certification or Audit:
 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Excess Emissions Summary					
Duration of excess emissions in reporting period due to:					
a. Startup/Shutdown	0.0				
b. Control equipment problems	0.0				
c. Process problems	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total duration of excess emissions (days)	0.0				
3. Total duration of excess emissions (%)	0.00%				

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details		
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			There were no periods of monitor of	downtime during this reporting period				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU022 SV031

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period:
Total Source Operating Days in Reporting Period:
Total Source Operating Days in Reporting Period:
Total Source Operating Days in Reporting Period:
N/A

Analyzer Analyte:
Analyzer Analyte:
Stock Flow
Sick Maihak

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318670/ 11318677

Date of Latest CMS Certification or Audit: 7/15/2019

Description of changes in CEMS, processes, or

W/	м	

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

					Excess Emissions Details	
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
			There were no periods of monitor do	owntime during this reporting period					
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: **Hibbing Taconite Company**

4950 Hwy 5 North

Company Address: Hibbing MN Process Unit Identification: EU022 SV032

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period: 1,854 hours Total Source Operating Days in Reporting Period: 79 days Emission Limitation: N/A Analyzer Analyte: NOX

Analyzer Manufacturer: **Teledyne Monitor Labs**

Analyzer Manufacturer Model No.: T200M Analyzer Serial Number: 195 Date of Latest CMS Certification or Audit: 10/29/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

CMS Performance Summary					
CMS Downtime in reporting period due to:					
a. Monitor equipment malfunctions	0.0				
b. Non-Monitor equipment malfunctions	0.0				
c. Quality assurance calibration	0.0				
d. Other known causes	0.0				
e. Unknown causes	0.0				
2. Total CMS Downtime (hours)	0.0				

0.00%

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

					Excess Emissions Details		
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

3. Total CMS Downtime (%)

	CMS Downtime Details							
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action				
			There were no periods of monitor d	owntime during this reporting period				
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						
		0.0						

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

4950 Hwy 5 North Hibbing MN

Process Unit Identification: EU022 SV032

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

Total Source Operating Time in Reporting Period: 1,854 hours
Total Source Operating Days in Reporting Period: 79 days
Emission Limitation: N/A
Analyzer Analyte: SO2

Analyzer Manufacturer: Teledyne Monitor Labs

Analyzer Manufacturer Model No.: T100H
Analyzer Serial Number: 131
Date of Latest CMS Certification or Audit: 10/30/2019

Description of changes in CEMS, processes, or

controls since last reporting period:

Company Address:

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.0
b. Control equipment problems	0.0
c. Process problems	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total duration of excess emissions (days)	0.0
3. Total duration of excess emissions (%)	0.00%

CMS Performance Summary	
CMS Downtime in reporting period due to:	
a. Monitor equipment malfunctions	0.0
 b. Non-Monitor equipment malfunctions 	0.0
c. Quality assurance calibration	0.0
d. Other known causes	0.0
e. Unknown causes	0.0
2. Total CMS Downtime (hours)	0.0
3. Total CMS Downtime (%)	0.00%

Excess Emissions Details							
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action	
There were no periods of excess emissions during this reporting period							

CMS Downtime Details									
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
	There were no periods of monitor downtime during this reporting period								
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							

Reporting Period Dates: October 1, 2019 - December 31, 2019

Company Name: Hibbing Taconite Company

Company Address: 4950 Hwy 5 North
Hibbing MN
Process Unit Identification: EU022 SV032

Process Unit Description: Pellet Indurating Furnace Line No. 3; straight grate indurating furnace.

N/A

Total Source Operating Time in Reporting Period:
Total Source Operating Days in Reporting Period:
Emission Limitation:
Analyzer Analyte:
Analyzer Manufacturer:

1,854 hours
79 days
N/A
Stack Flow
Stack Flow

Analyzer Manufacturer Model No.: FLSE 100-H K178 35HSHS

Analyzer Serial Number: 11318680/ 11318671

Date of Latest CMS Certification or Audit: 7/15/2019

Description of changes in CEMS, processes, or

CMS Performance Summary							
CMS Downtime in reporting period due to:	·						
 a. Monitor equipment malfunctions 	1.0						
 b. Non-Monitor equipment malfunctions 	0.0						
c. Quality assurance calibration	0.0						
d. Other known causes	0.0						
e. Unknown causes	0.0						
2. Total CMS Downtime (hours)	1.0						
3. Total CMS Downtime (%)	0.05%						

Excess Emissions Summary	
Duration of excess emissions in reporting period due to:	
a. Startup/Shutdown	0.
b. Control equipment problems	0.
c. Process problems	0.
d. Other known causes	0.
e. Unknown causes	0.
2. Total duration of excess emissions (days)	0.
3. Total duration of excess emissions (%)	0.00%

Excess Emissions Details						
Start Date & Time	End Date & Time	Duration of Excess Emissions (hours)	Pollutant	Magnitude of Emissions	Cause of Excess Emissions	Corrective Action
There were no periods of excess emissions during this reporting period						

	CMS Downtime Details								
Start Date & Time	End Date & Time	Duration of Monitor Downtime (hours)	Cause of Monitor Downtime	Corrective Action					
12/14/2019 14:00	12/14/2019 14:59	1.0	Monitor equipment malfunctions	Thawed frozen flow meter. Returned to operation. Followed SSM plan.					
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							
		0.0							